

A B S T R A C T

An impurity measuring device includes a table (T) on which a sample (S) is to be placed with its fracture surface (h) facing up, an illuminating means (7) for irradiating the fracture surface (h) with light (L) from a plurality of directions, an image sensing means for sensing an image of the fracture surface (h) irradiated with the light (L), continuous tone color image processing means for processing the sensed image into a continuous tone color image, and a binarizing means for binarizing the continuous tone color image through comparison between the result of the continuous tone color image processing and a threshold value. As the fracture surface (h) is irradiated with the light (L) from the plurality of directions, the image obtained by sensing the image of the fracture surface (h) is free from shading or optical irregularities caused by minute irregularities on the fracture surface (h). Therefore, impurities in the sample (S) can be accurately detected from the fracture surface (h) by subjecting the image to the continuous tone color image processing and binarization.